


Engineer: Jack Curtis	Date: 4/22/04	 JPS Communications 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Jack Curtis	Date: 4/22/04				
Approved: CTS	Date: 4/22/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 11/11/04	Size: A	Dwg. #: 5961-271126-APP	Rev: B	Sheet: 1 Of 1

APPLIES TO:

Motorola Maxtrac Mobile Radio (Rear Connector)
Motorola Radius M100 Mobile Radio (Rear Connector)
Motorola Radius M200 Mobile Radio (Rear Connector)

RADIO MODIFICATIONS:

None required.

RADIO PROGRAMMING:

1. Mobile radios should normally be programmed for low transmit power.
2. To provide Squelch Type of COR the Accessory Connector Configuration for Pin 4 must be programmed to SQ Detect.

RADIO CONTROLS:

1. Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio.

CABLING:

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291126	(5961-271126 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281126	(5961-271126 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271126	
Radio RF Connector Type		

DSP PROGRAMMING:

(See Notes)

RX Level	3*	0dBm*	See Notes
TX Level	6*	0dBm*	
Squelch Type	COR		
COR Polarity	Active Low*		
High Frequency Equalizer	4*	Flat*	
RX Audio Delay	2*	100 ms*	
TX Audio Delay (Radio Type)	0*	No Delay*	
Noise Reduction Value	0*	Off*	
VOX/VMR Threshold	1*	Med1*	
VOX/VMR Hang Time	3*	775 ms*	
COR Inhibit After PTT	1*	100 ms*	
All Others	As needed		

(* Indicates Default Value)

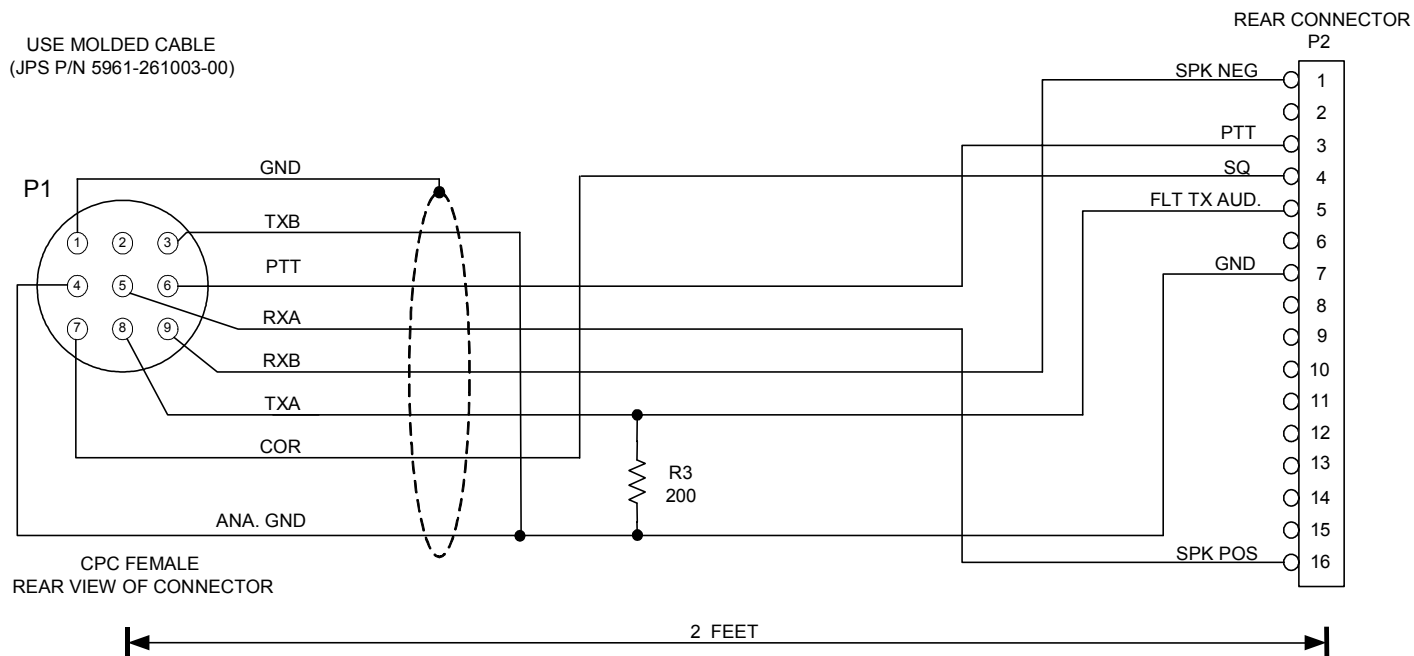
NOTES:

If Radio Programming step 2 is not done the Squelch Type will remain at the default VOX setting.

PURCHASED PART

Rev	ECO	Date
B		11-11-04

USE MOLDED CABLE
(JPS P/N 5961-261003-00)



CPC FEMALE
REAR VIEW OF CONNECTOR

COMPONENT PCB
(JPS P/N 5961-271000)

R3 JPS P/N 1820-201000
JU1
JU2
JU4
JU5

USED WITH:
MOTOROLA MAXTRAC MOBILE (REAR CONNECTOR)
MOTOROLA RADIUS M100 MOBILE (REAR CONNECTOR)
MOTOROLA RADIUS M200 MOBILE (REAR CONNECTOR)

USE MOTOROLA P/N HLN 9457A
(JPS P/N 0314-000203)
USE MOTOROLA EXTRACTION TOOL P/N 9491

PIN 4 ON THE REAR CONNECTOR MUST BE PROGRAMMED
FOR BOTH CARRIER AND PL TONE (IF USED).

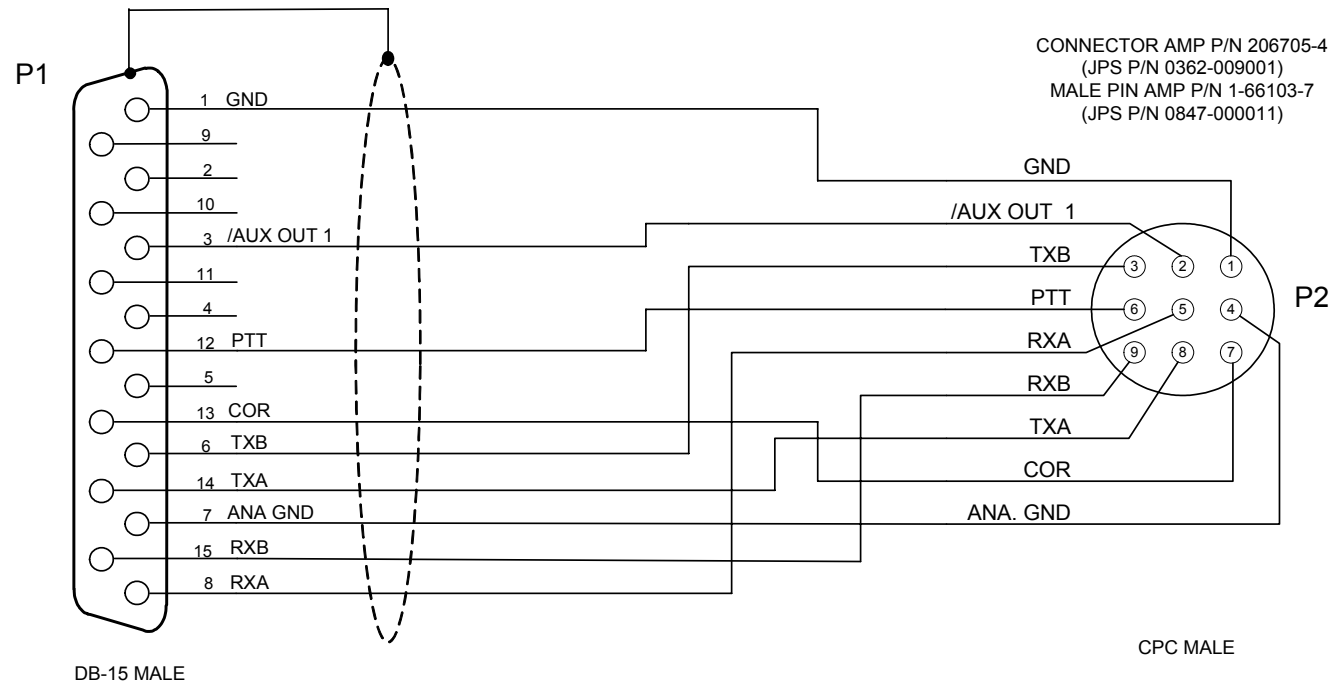
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	13	11	19	7	5	3	1

NOTE: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

Designed By:	Raytheon JPS Communications Raleigh, NC USA		
Drawn By:	EDV	Title CABLE, CPC TO MOTOROLA MAXTRAC MOBILE	
Checked By:	JAC	Size A	Document Number 5961-271126
		Issued Date	NOVEMBER 4, 2003
		Rev	B
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PURCHASED PART

Rev	ECO	Date
A		



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

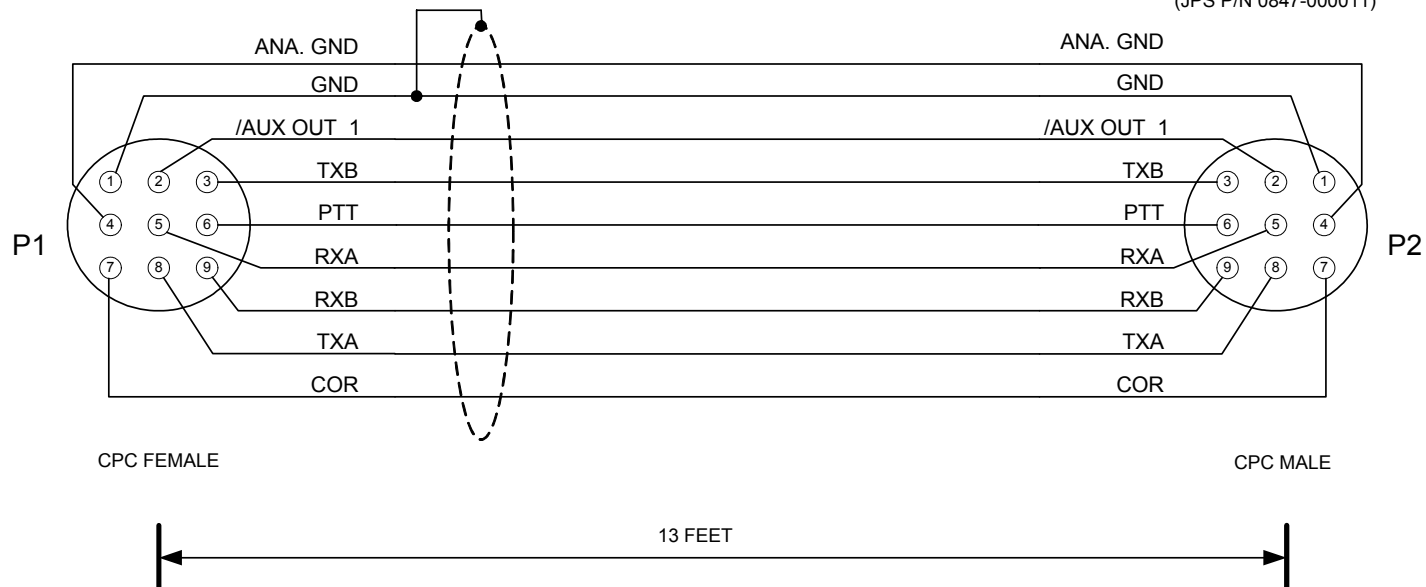
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-261002-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
A		

PURCHASED PART

CONNECTOR AMP P/N 206708-1
(JPS P/N 0362-005003)
FEMALE PIN AMP P/N 1-66105-8
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4
(JPS P/N 0362-009001)
MALE PIN AMP P/N 1-66103-7
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-281013-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	